



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 18 1995

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: Guidance on Use of ASTM's Emergency Standard for Alternative Procedures for the Assessment of Buried Steel Tanks Prior to the Addition of Cathodic Protection (ES 40 - 94)

FROM: Lisa C. Lund, Acting Director
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TO: State UST Contacts
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The purpose of this memorandum is to provide the subject guidance to implementing agencies. EPA recommends that implementing agencies determine that the methods described in a new industry consensus standard for ensuring the integrity of buried steel tanks prior to upgrading with cathodic protection, when combined with certain monthly monitoring, prevents releases in a manner that is no less protective of human health and the environment than methods specifically identified in the Federal underground storage tank (UST) upgrading standards. Upon such a determination, this combination method may be used to meet 40 CFR § 280.21(b)(2)'s requirement that tank integrity be ensured prior to upgrading with cathodic protection. See 40 CFR § 280.21(b)(2)(iv).

Specifically, EPA recommends that implementing agencies determine that the combination of:

- 1) the implementation of procedures in American Society of Testing and Materials (ASTM) Emergency Standard ES 40 - 94, AND;
- 2) monthly monitoring for releases in accordance with 40 CFR § 280.43(d) through (h) following the upgrade

constitutes a method that prevents releases in a manner that is no less protective of human health and the environment than the methods listed in 40 CFR § 280.21(b)(2)(i) through (iii), for the period of time that the ASTM Emergency Standard is valid. The ASTM Emergency Standard is valid for two years (November 15, 1994 to November 15, 1996).

The Agency recognizes that State and local implementing agencies can be more stringent than the Federal program, and that they may choose to accept or not accept this recommendation. Owners and operators of USTs should check with their implementing agency to determine if the above combination method is accepted before using it for regulatory compliance.

Included in "2) monthly monitoring..." above are interstitial monitoring, automatic tank gauging, ground water and vapor monitoring, and, where accepted by state and local implementing agencies, statistical inventory reconciliation or other methods meeting the standards in the referenced regulations. The combination of tank tightness testing and inventory control is not included in the referenced regulations.

The ASTM Emergency Standard sets forth for the first time procedures for inspecting and assessing the integrity of steel tanks without putting a person inside the tank. The Standard also defines the work that must be done so that an interested party can scrutinize the contractor's performance. Moreover, it provides standard procedures and thereby promotes consistency in the upgrading of buried steel tanks in those states and localities that already allow the use of these methods, as well as for those states that are deciding what methods to allow for inspecting and assessing buried steel tanks. For additional background on this issue, please see the attached discussion paper.

Implementing agencies, owners and operators should note that under the ASTM Emergency Standard there are criteria that providers of the services included in ES 40 - 94 must meet. For example, determining tank condition and suitability for upgrade using non-invasive techniques must be based on a data base from at least 100 sites where at least 200 tanks were excavated and evaluated. Also, there are many steps requiring action by a "corrosion expert," a term that has the same definition as in EPA's UST regulations.

It should be noted that EPA's UST regulations also provide for interior tank lining to be used as an upgrade option for existing UST systems. This guidance is in no way intended to discourage the use of tank lining as an acceptable upgrade option.

If you have any questions about ASTM ES 40 - 94, please call our technical contacts on this issue, Randy Nelson EPA Region 7 at (913) 551-7220, or Paul Miller at (703) 308-7242.

Attachment

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